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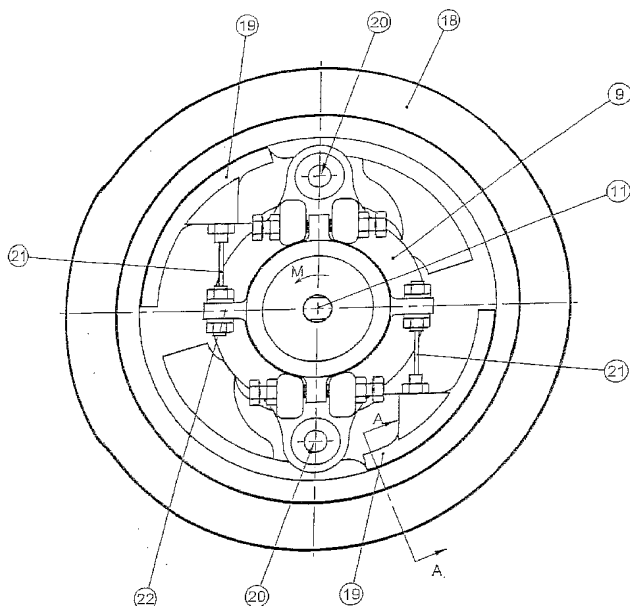
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(54) Title: DEVICE FOR A TORQUE OR SHEAR FORCE TRANSMITTER FOR THE DETERMINATION OF FIBRE CON-  
CENTRATION OR VISCOSITY IN PULP SUSPENSIONS AND METHOD FOR RESETTING OF THE TRANSMITTER SHAFT  
IN A TORQUE OR SHEAR FORCE TRANSMITTER



(57) Abstract: Device for a torque or shear transmitter  
for determination of fibre concentration or viscosity in  
pulp suspensions and which is adapted to measure an  
angle deviation between two concentric shafts (9, 11)  
whereby the arisen angle deviation forms a function  
of the torque applied on the measuring body (5). The  
device comprises a feedback system for bringing the  
inner shaft or measuring shaft (11) to take a zero position  
independent of the magnitude of the torque, and which  
system comprises an electromagnetic feedback coil (18),  
which encircles two pole shoes (19) journaled in bearing  
points (20) at the end of the outer shaft in the form of a  
hollow shaft (9), at the same time as each pole shoe (19) is  
connected to the measuring shaft (11), whereby a current,  
generated by means for a transducer (12) and is dependent  
on the present angle deviation, is sent to the winding (23)  
of the coil (18), where a magnetic field of force (25) is  
generated, whose strength is determined by the current  
flowing through the coil (18) and the distance (24), which  
arises between the pole shoes (19) and the magnetic parts  
of the feedback coil, which latter obtain different polarity  
and provides a resetting of the pole shoes (19) together  
with the measuring shaft (11) to a present set point at the  
same time as the magnitude of the current is a measure  
of the present shear force torque and is convertible to a

suitable output signal.